## **United States Department of Agriculture**



# Plant Fact Sheet



## OH-370 Big Bluestem

**Andropogon gerardii** Vitman

plant symbol = ANGE

Contributed by: USDA NRCS Elsberry Plant Materials Center



#### **Alternate Names**

Turkey foot

## **Key Web Sites**

Extensive information about this species is linked to the Plants web site. To access this information, go the Plants web site, select this plant, and utilize the links at the bottom of the Plants Profile for this species.

#### Uses

OH 370 big bluestem can be used for these type of plantings: prairie restoration, wildlife cover, roadside plantings, native gardens, and prairie landscaping. There was no selection made in OH 370 and as a result forage growth will be variable and plants maturing at different times.

#### Status

Please consult the PLANTS web site (<a href="http://plants.usda.gov/">http://plants.usda.gov/</a>) and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered

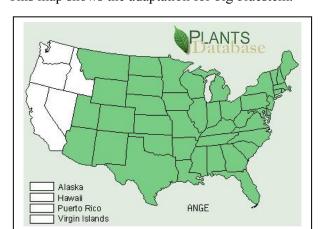
species, state noxious status, and wetland indicator values).

## **Description**

OH 370 big bluestem is a composite of 370 collections with the following origin: 194 collections from the state of Missouri, 85 collections from Arkansas, 82 accessions from Oklahoma, and 9 collections from Illinois. The name 'OH' refers to Ozark Highland; the '370' refers to the 370 collections in this composite. Big bluestem is a tall, warm-season, perennial native grass with stiff, erect culms; flattened and keeled sheaths; membranous ligules; and flat or folded leaf blades. Big bluestem has developed a very efficient spreading root system which may reach depths of 5-8 feet in northern latitudes, and 6-8 feet or more in the southern part of its natural range. Although short rhizomes may be present, it usually makes a bunch type growth. "OH 370" big bluestem is composed of many collections with a wide range of adaptation to soil and climate. It is one of the most widespread and important prairie forage grasses of the North American tallgrass prairie region. It is usually associated with one or more of the other three dominant species, indiangrass, (Sorghastrum nutans (L.) Nash.), switchgrass, (Panicum virgatum L), and little bluestem (Schizachyrium scoparium (Michx.) Nash.). Big bluestem occurs on subirrigated lowland, nearly level to gently undulating glacial till plains, overflow sites, level swales and depressions, residual and glacial uplands, and stream terraces and bottomlands along rivers and tributaries. The abundant, leafy forage is palatable to all classes of livestock.

#### **Known Distribution**

This map shows the adaptation for big bluestem.



## Adaptation

Big bluestem is adapted to most upland and some bottomland soils. Ecotypes are adapted to areas with as little as 14 inches to over 50 inches of average annual precipitation. The number of collections (370) from Southern Missouri, Northern Arkansas, Eastern Oklahoma and Southern Illinois guarantee the adaptation of this release to the entire southern portion of the state of Missouri, Northern part of Arkansas, and Eastern Oklahoma and Southern Illinois.

#### **Establishment**

Prepare a clean weed free seedbed by disking and harrowing or using chemical weed control. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow seed to be planted 1/4 to ½ inch deep. Use a planter that insures proper seeding depth and good seed and soil contact like a brillion seeder or a no-till grass seeder that is capable of handling and placing seed in a uniform manner. There are approximately 165,000 seeds in a pound of big bluestem.

## Seeding rates for big bluestem

#### For pasture and hay management:

A seeding rate of 10 pounds Pure Live Seed (PLS) per acre for pasture and hay is sufficient.

#### For seed production:

A seeding rate of 4.2 PLS pounds per acre in 30 inch rows is sufficient for seed production (40 PLS per linear foot).

Use no fertilizer the establishment year unless soil test indicates a low deficiency of less than 15 PPM of phosphorus and/or less than 90 PPM of potassium. Use no nitrogen during the establishment year as this can encourage weed competition.

## **Management**

Reduce weed competition by mowing over the height of the big bluestem plants or cultivating between the rows. Use a non- selective contact herbicide while dormant or a pre emergent herbicide to control annuals and perennial weeds after the big bluestem is established. Remove dead plant material in the spring for faster greenup by burning. Big bluestem is a fire climax type grass; it responds positive to burning.

#### **Pests and Potential Problems**

Rust and lodging are two potential problems associated with the growing of big bluestem for seed, pasture or hay.

#### **Environmental Concerns**

Big bluestem is not known to invade in areas where this species does not naturally occur.

#### **Prepared By & Species Coordinators:**

Jimmy Henry, Manager Steven Bruckerhoff, Conservation Agronomist Jerry Kaiser, Plant Materials Specialist Elsberry Plant Materials Center Elsberry, Missouri

November 2002

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <a href="http://plants.usda.gov">http://plants.usda.gov</a> and Plant Materials Program Web sites <a href="http://plants.usda.gov">http://plants.usda.gov</a>>.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.